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NOTICE OF ALLOWANCE AND FEE(S) DUE

826

7590

11/17/2009

ALSTON & BIRD LLP
BANK OF AMERICA PLAZA
101 SOUTH TRYON STREET, SUITE 4000
CHARLOTTE, NC 28280-4000

EXAMINER

LAZORCTK, JASON L.

ART UNIT

PAPER NUMBER

1791

DATE MAILED: 11/17/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,908	09/30/2003	Evon Llewellyn Crooks	030627/267420	9006

TITLE OF INVENTION: FILTERED CIGARETTE INCORPORATING AN ADSORBENT MATERIAL

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/17/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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826 7590 11/17/2009

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/17/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
LAZORCIK, JASON L.	1791	I31-344000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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EXAMINER

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Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 599 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 599 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/674,908

Examiner

JASON L. LAZORCIK

Applicant(s)

CROOKS ET AL.

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6/23/2009.
2. ☒ The allowed claim(s) is/are 21-23,25-39 and 41.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 6/23/2009
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Jason L Lazorkic/
Primary Examiner, Art Unit 1791

DETAILED ACTION
INTERVIEW SUMMARY

Responsive to Applicants reply dated June 23, 2009, the undersigned Examiner contacted Applicants representative, Christopher Humphrey (Reg.No. 43,683), by telephone on November 2, 2009 and November 3, 2009.

The June 23, 2009 claim amendment restricts the first and second longitudinally extending section of fibrous tow filter material (see claim 21, line 4 and claim 21, line 8, respectively) to consist of plasticized fibrous tow and further restricts the semi-permeable barrier (see claim 21, line 15) to consist of plasticized fibrous tow or a porous paper. Applicant was advised that since the Zhuang sorbent segments incorporate additional sorbent materials and therefore do not consist of plasticized fibrous tow, the instant claim amendments read over the Modified Counts Filter as set forth in prior Official communications (see for example Examiners Answer dated October 31, 2007).

Applicant was thereafter directed to the prior art references to Wise (US 3,658,069), US (2004/0237984), and Duke (US 5,657,772). Duke '772 teaches (see figure 2, col. 3, lines 8-11) a multi-component filter comprising first and second longitudinally extending sections of fibrous tow (11, 15) consisting of cellulose acetate, a cellulose acetate semi-permeable barrier (13) defining two hollow regions or compartments (12, 14) wherein both the compartment proximal to the tobacco rod and the compartment distal to the tobacco rod contain a granulated adsorbent material. An

analogous structure is disclosed in Figlar '984 (see Figure 4, ¶[0020], ¶[0028]) as well as in Wise '069 (see figure 1, col. 1, lines 63-70; col. 3, line 71-col. 4, line 27).

Although each of the above noted cigarette structures comprises an upstream and a downstream chamber or hollow region filled with an adsorbent and do not disclose an empty, hollow chamber as in Applicants preferred filter structure, Applicant was advised that the claim language was couched in "comprising" language and was therefore not construed to be exclusive of additional components. That is, even though the above noted references teach upstream and downstream cavities filled with granulated adsorbent, the filter structure was still construed to comprise a "hollow first region proximal to the tobacco rod" as recited in each independent claim.

In view of the above noted references and as set forth in the Examiners Amendment below, Applicant further limited the structure of the hollow region by reciting the limitation that said region "consists of an empty space for intermixing of mainstream smoke prior to entry of the smoke into the adsorbent-containing region of the compartment". None of the above noted references teach a hollow region defined by an empty space proximal to the tobacco rod.

Applicant was further directed to the reference of Berger (US 3,811, 451). Berger teaches (see figure 3, col. 5, line 46-col.6, line 58) a continuously extruded cellulose acetate filter with defined interior cavities which may be filled with an adsorbent material such as activated carbon. Applicant was advised that in figure 3, Berger teaches that a filled cavity may be provided in series with an unfilled, empty cavity (72). In response, Applicant noted that the cellulose acetate fibers necessarily define the annular wall (68) of the empty cavity (72). Applicant further noted that Berger

is silent regarding the relative arrangement of the hollow cavity and the filled cavity with respect to the tobacco rod in the cigarette filter.

In view of the Berger reference and as noted in the Examiners Amendment below, Applicant further limited the structure of the filter by requiring that the "plug wrap forms an inner wall of the compartment". Since Berger teaches that the empty cavity comprises an annular wall of cellulose acetate fibers, Berger does not teach a cigarette structure wherein the plug wrap forms an inner wall of the compartment.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher Humphrey on November 3, 2009.

The application has been amended as follows:

Claim 21 dated June 23, 2009 has been amended as follows,

21. (Currently Amended) A cigarette comprising a tobacco rod and a filter element connected to the tobacco rod, said filter element having an end proximal to the tobacco rod and an end distal from the tobacco rod, wherein said filter element comprises:

a first longitudinally extending section of fibrous tow filter material positioned at the end of the filter element proximal to the tobacco rod and

abutting a charge of smokable filler material of the tobacco rod, wherein the first section of fibrous tow filter material consists of plasticized fibrous tow;

a second longitudinally extending section of fibrous tow filter material positioned at the end of the filter element distal from the tobacco rod and spaced apart from said first section of filter material, wherein the two sections of filter material are circumscribed by a plug wrap and a compartment is defined and bounded by the two sections of filter material and the plug wrap, wherein the second section of fibrous tow filter material consists of plasticized fibrous tow and the plug wrap forms [[a]] an inner wall of the compartment; and

a semi-permeable barrier dividing said compartment into a hollow first region proximal to the tobacco rod and a second region distal to the tobacco rod and containing an adsorbent material, the semi-permeable barrier consisting of a porous paper or a plasticized fibrous tow filter material, wherein the hollow first region consists of an empty space for intermixing of mainstream smoke prior to entry of the smoke into the adsorbent-containing region of the compartment.

Claim 41 dated June 23, 2009 has been amended as follows,

41. (Currently Amended) A cigarette comprising a tobacco rod and a filter element connected to the tobacco rod, said filter element having an end proximal to the tobacco rod and an end distal from the tobacco rod, wherein said filter element comprises:

a first longitudinally extending filter segment consisting of plasticized cellulose acetate tow positioned proximal to the tobacco rod and abutting a charge of smokable filler material of the tobacco rod;

a second longitudinally extending filter segment consisting of plasticized cellulose acetate tow positioned distal from the tobacco rod and spaced apart from said first filter segment, wherein the two filter segments define a compartment there between and are circumscribed by a plug wrap; and

a semi-permeable barrier consisting of plasticized cellulose acetate tow dividing said compartment into a hollow first region proximal to the tobacco rod and a second region distal to the tobacco rod and containing a granular adsorbent material, wherein the plug wrap forms [[a]] an inner wall for both regions of the compartment, and wherein the hollow first region consists of an empty space for intermixing of mainstream smoke prior to entry of the smoke into the adsorbent-containing region of the compartment.

Allowable Subject Matter

Claims 21-23, 25-39, and 41 as amended by Examiners Amendment above are allowed.

The following is an examiner's statement of reasons for allowance:

As noted in the Interview Summary above, the references to Counts, Zhuang, and Yang have been previously construed to read upon the claimed invention. The Zhuang monolithic sorbent segments do not consist of plasticized fibrous tow as recited in independent claim 21 and independent claim 41.

The references to Wise (US 3,658,069), US (2004/0237984), Duke (US 5,657,772), and Berger (US 3,811, 451) constitute the closest related prior art of record.

Wise (US 3,658,069), US (2004/0237984), Duke (US 5,657,772) each teach multi-segment cigarette filters with upstream and downstream hollow chambers which are filled with granulated adsorbent materials. None of these references teach nor fairly

suggest that the hollow cavity proximal to the tobacco rod is a hollow region of empty space as recited in each of the independent claims 21 and 41.

Berger (US 3,811, 451) teaches a plasticized fibrous tow filter comprising sequentially adsorbent filled and empty chambers within the filter rod. Berger is silent regarding the relative arrangement of the filled and unfilled chambers within the filter and Berger further teaches that the wall of the hollow chamber comprises an annular wall of cellulose acetate fibers. It follows that a cigarette fabricated from the Berger filter fails to teach that "the plug wrap forms an inner wall of the compartment" as recited in independent claims 21 and 41 above.

In view of the foregoing discussion, it is the Examiners assessment that no reference viewed alone or in combination teaches nor fairly suggests the cigarette structure as recited in the claimed invention. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON L. LAZORCIK whose telephone number is

(571)272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason L Lazorcik/
Primary Examiner, Art Unit 1791